GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: June 25, 2003, 11:42:45 ; Search time 38.7 Seconds
(without alignments)
51.648 Million cell updates/sec

Title: US-09-869-540A-2_COPY_5_19
Perfect score: 90
Sequence: 1 LRCMLGRVYRPCWQV 15

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	90	100.0	15	21	AAB12783	Rat MCH ligand pep
2	90	100.0	15	23	AAU77537	Melanin concentrat
3	90	100.0	16	21	AAB12782	Rat MCH ligand pep
4	90	100.0	16	23	AAU77536	Melanin concentrat
5	90	100.0	17	23	AAU77535	Melanin concentrat
6	90	100.0	18	21	AAB12780	Rat MCH ligand pep
7	90	100.0	18	23	AAU77534	Melanin concentrat
8	90	100.0	19	11	AAR07358	Cyclic mammalian m
9	90	100.0	19	20	AAY16571	Melanin-concentrat
10	90	100.0	19	21	AAB12777	Rat MCH ligand pep
11	90	100.0	19	21	AAY90259	Melanin concentrat
12	90	100.0	19	22	AAU25615	G Protein-Coupled
13	90	100.0	19	22	AAE07335	Mammalian melanin-
14	90	100.0	19	22	AAB68894	Human mMCH. Homo
15	90	100.0	19	22	AAB48153	Rat/human melanin-
16	90	100.0	19	22	AAB37951	Melanin concentrat
17	90	100.0	19	23	AAU77533	Melanin concentrat
18	90	100.0	165	11	AAR07360	Rat melanin-concen
19	86	95.6	14	21	AAB12784	Rat MCH ligand pep
20	86	95.6	14	23	AAU77538	Melanin concentrat
21	86	95.6	16	21	AAB12781	Rat MCH ligand pep
22	85	94.4	17	4	AAP30689	Sequence of growth
23	84	93.3	19	22	AAE07337	Human truncated me
24	83	92.2	17	4	AAP30438	Sequence of growth
25	83	92.2	17	5	AAP40253	Growth hormone rel
26	82	91.1	17	4	AAP30688	Sequence of growth
27	82	91.1	17	22	AAU25616	G Protein-Coupled
28	82	91.1	17	22	AAB48154	Salmon melanin-con
29	82	91.1	19	22	AAE07338	Human truncated me
30	81	90.0	13	21	AAB12785	Rat MCH ligand pep
31	81	90.0	13	22	AAE07336	Human truncated me
32	81	90.0	13	23	AAU77539	Melanin concentrat
33	70	77.8	16	21	AAB12776	Rat SLC-1 ligand p
34	70	77.8	16	22	AAE07334	Human truncated me
35	66	73.3	11	22	AAE07331	Human truncated me
36	66	73.3	11	22	AAE07339	Human truncated me
37	66	73.3	11	22	AAE07340	Human truncated me
38	66	73.3	11	22	AAE07341	Human truncated me
39	66	73.3	11	22	AAE07342	Human truncated me
40	66	73.3	11	22	AAE07343	Human truncated me
41	66	73.3	11	22	AAE07344	Human truncated me
42	66	73.3	11	22	AAE07345	Human truncated me
43	66	73.3	11	22	AAE07346	Human truncated me
44	66	73.3	11	22	AAE07347	Human truncated me
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ALIGNMENTS

RESULT 1
AAB12783
ID AAB12783 standard; peptide; 15 AA.
XX
AC AAB12783;
XX
DT 22-NOV-2000 (first entry)
XX
DE Rat MCH ligand peptide SEQ ID NO:22.
XX
KW SLC-1; MHC; melanin concentrating hormone; screening; eating;
KW appetite stimulator; appetite regulator; period pain; atonic bleeding;
KW caesarean section; milk congestion; antiobestic agent; drug;
KW foetal asphyxia; cevical rupture; premature birth; uterine rupture;
KW Prader-Willi syndrome; anorectic; gynaecological; abortifaciant;
KW antoanaemia; anabolic; orphan G protein-couple receptor protein.
XX
OS Rattus sp.
XX
FH Key Location/Qualifiers
FT Disulfide-bond 3..12
XX
PN WO200040725-A1.
XX
PD 13-JUL-2000.
XX
PF 27-DEC-1999; 99WO-JP07336.
XX
PR 28-DEC-1998; 98JP-0374454.
PR 28-APR-1999; 99JP-0122688.
PR 02-SEP-1999; 99JP-0249300.
XX
PA (TAKE) TAKEDA CHEM IND LTD.

```
XX
PI   Mori M,  Shimomura Y,  Takekawa S,  Sugo T,  Ishibashi Y,  Kitada C;
PI   Suzuki N;
XX
DR   WPI; 2000-475832/41.
XX
PT   Screening methods for compounds as SLC-1 (ant)agonists useful in the
PT   treatment of eating disorders and as preventives and remedies for e.g.
PT   atonic bleeding and Prader-Willi syndrome  -
XX
PS   Example 17; Page 118; 123pp; Japanese.
XX
CC   The present invention describes a method for screening components (I) or
CC   their salts that can alter the binding properties of melanin-
CC   concentrating hormone (MCH) or its derivative or salt to SLC-1 or its
CC   salt. Compounds identified by (I) are useful as SLC-1 (ant)agonists in
CC   eating disorders and as preventives and remedies for e.g. period pains,
CC   uterine recovery failure, caesarean section, artificial interruption of
CC   pregnancy, galactostosis, tonic uterine contraction, foetal asphyxia,
CC   rupture of uterus, cervical rupture, premature birth and Prader-Willi
CC   syndrome. The present sequence represents a rat MHC ligand peptide
CC   which is used in the exemplification of the present invention.
XX
SQ   Sequence   15 AA;

  Query Match             100.0%;  Score 90;  DB 21;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-06;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 LRCMLGRVYRPCWQV 15
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Db          1 LRCMLGRVYRPCWQV 15


RESULT 2
AAU77537
ID   AAU77537 standard; Protein; 15 AA.
XX
AC   AAU77537;
XX
DT   05-JUN-2002  (first entry)
XX
DE   Melanin concentrating hormone (MCH) residues 5-19.
XX
KW   G protein-coupled orphan; receptor; SLT; melanin-concentrating hormone;
KW   MCH; appetite-stimulating agent; obesity; malignant mastocystosis;
KW   exogenous obesity; hyperinsulinar obesity; sexual function disorder;
KW   overpowering intermittent pain; still born; uterus rupture;
KW   premature birth; Prader-Willi syndrome.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "OTHER= 3-[4-hydroxy-3-(125-iodo)-phenyl]
FT                          propanoyl"
FT   Disulfide-bond  3..12
XX
PN   WO200203070-A1.
XX
PD   10-JAN-2002.
XX
PF   04-JUL-2001; 2001WO-JP05809.
XX
PR   05-JUL-2000; 2000JP-0208254.
XX
PA   (TAKE ) TAKEDA CHEM IND LTD.
XX
PI   Mori M,  Shimomura Y,  Harada M,  Sugo T,  Shintani Y;
XX
DR   WPI; 2002-164552/21.
XX
PT   Screening for compounds or salts which alter affinity of
PT   melanin-concentrating hormone with its receptor to provide agonists as
PT   appetite-stimulating agents and its antagonist for preventing or
PT   treating obesity, uses a protein or hormone -
XX
PS   Disclosure; Page 18; 112pp; Japanese.
XX
CC   The invention describes a method of screening for compounds or their
CC   salts that can change affinity of melanin-concentrating hormone (MCH)
CC   with its G protein-coupled orphan receptor protein, SLT. The screened
CC   MCH receptor agonists are useful as appetite-stimulating agents and its
CC   antagonist for preventing or treating obesity e.g. malignant
CC   mastocystosis, exogenous obesity and hyperinsulinar obesity, and also
CC   for treating sexual function disorders, overpowering intermittent pains,
CC   still borns, uterus rupture, premature birth and Prader-Willi syndrome.
CC   This sequence represents a segment of the melanin-concentrating hormone
CC   (MCH), described in the invention.
XX
SQ   Sequence   15 AA;

  Query Match             100.0%;  Score 90;  DB 23;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-06;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 LRCMLGRVYRPCWQV 15
              |||||||||||||||
Db          1 LRCMLGRVYRPCWQV 15


RESULT 3
AAB12782
ID   AAB12782 standard; peptide; 16 AA.
XX
AC   AAB12782;
XX
DT   22-NOV-2000  (first entry)
XX
DE   Rat MCH ligand peptide SEQ ID NO:21.
XX
KW   SLC-1; MHC; melanin concentrating hormone; screening; eating;
KW   appetite stimulator; appetite regulator; period pain; atonic bleeding;
KW   caesarean section; milk congestion; antiobestic agent; drug;
KW   foetal asphyxia; cevical rupture; premature birth; uterine rupture;
KW   Prader-Willi syndrome; anorectic; gynaecological; abortifaciant;
KW   antoanaemia; anabolic; orphan G protein-couple receptor protein.
XX
OS   Rattus sp.
XX
FH   Key             Location/Qualifiers
FT   Disulfide-bond  4..13
XX
PN   WO200040725-A1.
XX
PD   13-JUL-2000.
XX
PF   27-DEC-1999;   99WO-JP07336.
XX
PR   28-DEC-1998;   98JP-0374454.
PR   28-APR-1999;   99JP-0122688.
PR   02-SEP-1999;   99JP-0249300.
XX
PA   (TAKE ) TAKEDA CHEM IND LTD.
XX
PI   Mori M,  Shimomura Y,  Takekawa S,  Sugo T,  Ishibashi Y,  Kitada C;
PI   Suzuki N;
XX
DR   WPI; 2000-475832/41.
XX
PT   Screening methods for compounds as SLC-1 (ant)agonists useful in the
PT   treatment of eating disorders and as preventives and remedies for e.g.
PT   atonic bleeding and Prader-Willi syndrome  -
XX
PS   Claim 12; Page 92; 123pp; Japanese.
```

```
XX
CC   The present invention describes a method for screening components (I) or
CC   their salts that can alter the binding properties of melanin-
CC   concentrating hormone (MCH) or its derivative or salt to SLC-1 or its
CC   salt. Compounds identified by (I) are useful as SLC-1 (ant)agonists in
CC   eating disorders and as preventives and remedies for e.g. period pains,
CC   uterine recovery failure, caesarean section, artificial interruption of
CC   pregnancy, galactostosis, tonic uterine contraction, foetal asphyxia,
CC   rupture of uterus, cervical rupture, premature birth and Prader-Willi
CC   syndrome. The present sequence represents a rat MHC ligand peptide
CC   which is used in the exemplification of the present invention.
XX
SQ   Sequence   16 AA;

  Query Match             100.0%;  Score 90;  DB 21;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 1.9e-06;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 LRCMLGRVYRPCWQV 15
              |||||||||||||||
Db          2 LRCMLGRVYRPCWQV 16


RESULT 4
AAU77536
ID   AAU77536 standard; Protein; 16 AA.
XX
AC   AAU77536;
XX
DT   05-JUN-2002  (first entry)
XX
DE   Melanin concentrating hormone (MCH) residues 4-19.
XX
KW   G protein-coupled orphan; receptor; SLT; melanin-concentrating hormone;
KW   MCH; appetite-stimulating agent; obesity; malignant mastocystosis;
KW   exogenous obesity; hyperinsulinar obesity; sexual function disorder;
KW   overpowering intermittent pain; still born; uterus rupture;
KW   premature birth; Prader-Willi syndrome.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "OTHER= 3-[4-hydroxy-3-(125-iodo)-phenyl]
FT                         propanoyl"
FT   Disulfide-bond  4..13
XX
PN   WO200203070-A1.
XX
PD   10-JAN-2002.
XX
PF   04-JUL-2001; 2001WO-JP05809.
XX
PR   05-JUL-2000; 2000JP-0208254.
XX
PA   (TAKE ) TAKEDA CHEM IND LTD.
XX
PI   Mori M,  Shimomura Y,  Harada M,  Sugo T,  Shintani Y;
XX
DR   WPI; 2002-164552/21.
XX
PT   Screening for compounds or salts which alter affinity of
PT   melanin-concentrating hormone with its receptor to provide agonists as
PT   appetite-stimulating agents and its antagonist for preventing or
PT   treating obesity, uses a protein or hormone -
XX
PS   Disclosure; Page 18; 112pp; Japanese.
XX
CC   The invention describes a method of screening for compounds or their
CC   salts that can change affinity of melanin-concentrating hormone (MCH)
CC   with its G protein-coupled orphan receptor protein, SLT. The screened
CC   MCH receptor agonists are useful as appetite-stimulating agents and its
CC   antagonist for preventing or treating obesity e.g. malignant
CC   mastocystosis, exogenous obesity and hyperinsulinar obesity, and also
CC   for treating sexual function disorders, overpowering intermittent pains,
CC   still borns, uterus rupture, premature birth and Prader-Willi syndrome.
CC   This sequence represents a segment of the melanin-concentrating hormone
CC   (MCH), described in the invention.
XX
SQ   Sequence   16 AA;

  Query Match             100.0%;  Score 90;  DB 23;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 1.9e-06;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 LRCMLGRVYRPCWQV 15
              |||||||||||||||
Db          2 LRCMLGRVYRPCWQV 16


RESULT 5
AAU77535
ID   AAU77535 standard; Protein; 17 AA.
XX
AC   AAU77535;
XX
DT   05-JUN-2002  (first entry)
XX
DE   Melanin concentrating hormone (MCH) residues 3-19.
XX
KW   G protein-coupled orphan; receptor; SLT; melanin-concentrating hormone;
KW   MCH; appetite-stimulating agent; obesity; malignant mastocystosis;
KW   exogenous obesity; hyperinsulinar obesity; sexual function disorder;
KW   overpowering intermittent pain; still born; uterus rupture;
KW   premature birth; Prader-Willi syndrome.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "OTHER= 3-[4-hydroxy-3-(125-iodo)-phenyl]
FT                         propanoyl"
FT   Disulfide-bond  5..14
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PN   WO200203070-A1.
XX
PD   10-JAN-2002.
XX
PF   04-JUL-2001; 2001WO-JP05809.
XX
PR   05-JUL-2000; 2000JP-0208254.
XX
PA   (TAKE ) TAKEDA CHEM IND LTD.
XX
PI   Mori M,  Shimomura Y,  Harada M,  Sugo T,  Shintani Y;
XX
DR   WPI; 2002-164552/21.
XX
PT   Screening for compounds or salts which alter affinity of
PT   melanin-concentrating hormone with its receptor to provide agonists as
PT   appetite-stimulating agents and its antagonist for preventing or
PT   treating obesity, uses a protein or hormone -
XX
PS   Disclosure; Page 17; 112pp; Japanese.
XX
CC   The invention describes a method of screening for compounds or their
CC   salts that can change affinity of melanin-concentrating hormone (MCH)
CC   with its G protein-coupled orphan receptor protein, SLT. The screened
CC   MCH receptor agonists are useful as appetite-stimulating agents and its
CC   antagonist for preventing or treating obesity e.g. malignant
CC   mastocystosis, exogenous obesity and hyperinsulinar obesity, and also
CC   for treating sexual function disorders, overpowering intermittent pains,
CC   still borns, uterus rupture, premature birth and Prader-Willi syndrome.
CC   This sequence represents a segment of the melanin-concentrating hormone
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CC   (MCH), described in the invention.
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SQ   Sequence * 17 AA;

  Query Match             100.0%;  Score 90;  DB 23;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2e-06;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 LRCMLGRVYRPCWQV 15
              |||||||||||||||
Db          3 LRCMLGRVYRPCWQV 17


RESULT 6
AAB12780
ID   AAB12780 standard; peptide; 18 AA.
XX
AC   AAB12780;
XX
DT   22-NOV-2000  (first entry)
XX
DE   Rat MCH ligand peptide SEQ ID NO:19.
XX
KW   SLC-1; MHC; melanin concentrating hormone; screening; eating;
KW   appetite stimulator; appetite regulator; period pain; atonic bleeding;
KW   caesarean section; milk congestion; antiobestic agent; drug;
KW   foetal asphyxia; cevical rupture; premature birth; uterine rupture;
KW   Prader-Willi syndrome; anorectic; gynaecological; abortifaciant;
KW   antoanaemia; anabolic; orphan G protein-couple receptor protein.
XX
OS   Rattus sp.
XX
FH   Key             Location/Qualifiers
FT   Disulfide-bond  6..15
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PN   WO200040725-A1.
XX
PD   13-JUL-2000.
XX
PF   27-DEC-1999;   99WO-JP07336.
XX
PR   28-DEC-1998;   98JP-0374454.
PR   28-APR-1999;   99JP-0122688.
PR   02-SEP-1999;   99JP-0249300.
XX
PA   (TAKE ) TAKEDA CHEM IND LTD.
XX
PI   Mori M,  Shimomura Y,  Takekawa S,  Sugo T,  Ishibashi Y,  Kitada C;
PI   Suzuki N;
XX
DR   WPI; 2000-475832/41.
XX
PT   Screening methods for compounds as SLC-1 (ant)agonists useful in the
PT   treatment of eating disorders and as preventives and remedies for e.g.
PT   atonic bleeding and Prader-Willi syndrome  -
XX
PS   Example 17; Page 117; 123pp; Japanese.
XX
CC   The present invention describes a method for screening components (I) or
CC   their salts that can alter the binding properties of melanin-
CC   concentrating hormone (MCH) or its derivative or salt to SLC-1 or its
CC   salt. Compounds identified by (I) are useful as SLC-1 (ant)agonists in
CC   eating disorders and as preventives and remedies for e.g. period pains,
CC   uterine recovery failure, caesarean section, artificial interruption of
CC   pregnancy, galactostosis, tonic uterine contraction, foetal asphyxia,
CC   rupture of uterus, cervical rupture, premature birth and Prader-Willi
CC   syndrome. The present sequence represents a rat MHC ligand peptide
CC   which is used in the exemplification of the present invention.
XX
SQ   Sequence   18 AA;

  Query Match             100.0%;  Score 90;  DB 21;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-06;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 LRCMLGRVYRPCWQV 15
              |||||||||||||||
Db          4 LRCMLGRVYRPCWQV 18


RESULT 7
AAU77534
ID   AAU77534 standard; Protein; 18 AA.
XX
AC   AAU77534;
XX
DT   05-JUN-2002  (first entry)
XX
DE   Melanin concentrating hormone (MCH) residues 2-19.
XX
KW   G protein-coupled orphan; receptor; SLT; melanin-concentrating hormone;
KW   MCH; appetite-stimulating agent; obesity; malignant mastocystosis;
KW   exogenous obesity; hyperinsulinar obesity; sexual function disorder;
KW   overpowering intermittent pain; still born; uterus rupture;
KW   premature birth; Prader-Willi syndrome.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "OTHER= 3-[4-hydroxy-3-(125-iodo)-phenyl]
FT                        propanoyl"
FT   Disulfide-bond  6..15
XX
PN   WO200203070-A1.
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PD   10-JAN-2002.
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PF   04-JUL-2001; 2001WO-JP05809.
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PR   05-JUL-2000; 2000JP-0208254.
XX
PA   (TAKE ) TAKEDA CHEM IND LTD.
XX
PI   Mori M,  Shimomura Y,  Harada M,  Sugo T,  Shintani Y;
XX
DR   WPI; 2002-164552/21.
XX
PT   Screening for compounds or salts which alter affinity of
PT   melanin-concentrating hormone with its receptor to provide agonists as
PT   appetite-stimulating agents and its antagonist for preventing or
PT   treating obesity, uses a protein or hormone -
XX
PS   Disclosure; Page 17; 112pp; Japanese.
XX
CC   The invention describes a method of screening for compounds or their
CC   salts that can change affinity of melanin-concentrating hormone (MCH)
CC   with its G protein-coupled orphan receptor protein, SLT. The screened
CC   MCH receptor agonists are useful as appetite-stimulating agents and its
CC   antagonist for preventing or treating obesity e.g. malignant
CC   mastocystosis, exogenous obesity and hyperinsulinar obesity, and also
CC   for treating sexual function disorders, overpowering intermittent pains,
CC   still borns, uterus rupture, premature birth and Prader-Willi syndrome.
CC   This sequence represents a segment of the melanin-concentrating hormone
CC   (MCH), described in the invention.
XX
SQ   Sequence   18 AA;

  Query Match             100.0%;  Score 90;  DB 23;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-06;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 LRCMLGRVYRPCWQV 15
              |||||||||||||||
Db          4 LRCMLGRVYRPCWQV 18
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```
RESULT 8
AAR07358
ID   AAR07358 standard; protein; 19 AA.
XX
AC   AAR07358;
XX
DT   29-JAN-1991  (first entry)
XX
DE   Cyclic mammalian melanin-concentrating hormone peptide.
XX
KW   Melanin concentrating hormone; skin disorders; melanomas;
KW   ACTH secretion.
XX
OS   synthetic.
XX
FH   Key             Location/Qualifiers
FT   Disulfide-bond  7..16
XX
PN   WO9011295-A.
XX
PD   04-OCT-1990.
XX
PF   20-MAR-1990;   90WO-US01492.
XX
PR   22-MAR-1989;   89US-0326984.
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XX
PI   Vaughan J,  Fischer WH,  Rivier JE,  Nahon JM,  Presse FG,  Vale WW;
XX
DR   WPI; 1990-320225/42.
DR   N-PSDB; AAQ06238.
XX
PT   Cyclic mammalian hormone for concentrating mammalian melanin -
PT   comprises peptide based on 19 amino acid residues with cysteine
PT   linkages.
XX
PS   Claim 2; page 43; 47pp; English.
XX
CC   This is the sequence of a cyclic mammalian melanin-concentrating
CC   hormone (MCH) peptide.  MCH is useful for treating skin disorders,
CC   for suppressing the proliferation of melanoma cells and for
CC   modulating secreton of ACTH.  Monoclonal antibodies raised against
CC   this peptide sequence are useful for assaying tumour cells.
CC   See also AAQ06239-48.
XX
SQ   Sequence   19 AA;

  Query Match             100.0%;  Score 90;  DB 11;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-06;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 LRCMLGRVYRPCWQV 15
              |||||||||||||||
Db          5 LRCMLGRVYRPCWQV 19


RESULT 9
AAY16571
ID   AAY16571 standard; Peptide; 19 AA.
XX
AC   AAY16571;
XX
DT   10-AUG-1999  (first entry)
XX
DE   Melanin-concentrating hormone peptide sequence.
XX
KW   Human 11cb splice variant; antibacterial; gene therapy; vaccine; HIV-1;
KW   HIV-2; pain; cancer; diabetes; obesity; anorexia; bulimia; asthma;
KW   Parkinson's disease; heart failure; hypotension; hypertension;
KW   urinary retention; osteoporosis; angina pectoris; myocardial infarction;
KW   ulcer; allergy; benign prostatic hypertrophy; psychotic disorder;
KW   neurological disorder; anxiety; schizophrenia; manic depression;
KW   delirium; dementia; severe mental retardation; dyskinesia;
KW   Huntington's disease; Gilles de la Tourette's syndrome;
KW   bacterial adhesion; Melanin-concentrating hormone.
XX
OS   Homo sapiens.
XX
PN   WO9928492-A1.
XX
PD   10-JUN-1999.
XX
PF   02-DEC-1998;   98WO-US25497.
XX
PR   15-APR-1998;   98US-0060504.
PR   03-DEC-1997;   97US-0984288.
PR   05-FEB-1998;   98US-0073747.
XX
PA   (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PI   Ames RS,  Bergsma D,  Chambers JK,  Ellis CE,  Foley JJ;
PI   Sarau HM;
XX
DR   WPI; 1999-371132/31.
XX
PT   New human 11cb splice variant polypeptide and polynucleotide
XX
PS   Example 3; Page 45; 56pp; English.
XX
CC   The present sequence represents melanin-concentrating hormone, which is a
CC   ligand for the human 11cb splice variant polypeptide. 11cb splice variant
CC   polypeptides and polynucleotides are useful for diagnosing diseases due
CC   to an infection of an organism with the 11cb splice variant gene. They
CC   can diagnose the stage and type of infection. 11cb splice variant
CC   polypeptides are also useful for screening for compounds which affect
CC   activity of the protein. These can be used in treatment to inhibit
CC   (antagonist i.e. antibacterial drugs) or enhance (agonist) 11cb splice
CC   variant activity, in addition to direct administration of 11cb splice
CC   variant polypeptides to treat conditions associated with a lack of 11cb
CC   splice variant polypeptide, or direct administration of antisense
CC   sequences to prevent expression. 11cb splice variant polypeptides
CC   (administered directly, in a vector i.e. gene therapy, and as a vaccine)
CC   and antibodies induce an immune response to immunize and prevent disease.
CC   Diseases diagnosed, prevented or treated include HIV-1 or -2 infection;
CC   pain; cancer; diabetes; obesity; feeding and drinking abnormalities
CC   e.g. anorexia, bulimia; asthma; Parkinson's disease; acute and congestive
CC   heart failure; hypotension; hypertension; urinary retention;
CC   osteoporosis; angina pectoris; myocardial infarction; ulcers; allergies;
CC   benign prostatic hypertrophy and psychotic and neurological disorders,
CC   including anxiety, schizophrenia, manic depression, delirium, dementia
CC   or severe mental retardation, and dyskinesias, such as Huntington's
CC   disease or Gilles de la Tourette's syndrome. 11cb splice variant
CC   polypeptides, polynucleotides and their (ant)agonists can prevent
CC   adhesion of bacteria to matrix proteins, and are useful for use on
CC   wounds and body implants to prevent bacterial infection.
XX
SQ   Sequence   19 AA;

  Query Match             100.0%;  Score 90;  DB 20;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-06;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 LRCMLGRVYRPCWQV 15
              |||||||||||||||
Db          5 LRCMLGRVYRPCWQV 19


RESULT 10
AAB12777
ID   AAB12777 standard; peptide; 19 AA.
XX
AC   AAB12777;
XX
```

DT 22-NOV-2000 (first entry)
XX
DE Rat MCH ligand peptide SEQ ID NO:2.
XX
KW SLC-1; MHC; melanin concentrating hormone; screening; eating;
KW appetite stimulator; appetite regulator; period pain; atonic bleeding;
KW caesarean section; milk congestion; antiobestic agent; drug;
KW foetal asphyxia; cevical rupture; premature birth; uterine rupture;
KW Prader-Willi syndrome; anorectic; gynaecological; abortifaciant;
KW antoanaemia; anabolic; orphan G protein-couple receptor protein.
XX
OS Rattus sp.
XX
FH Key Location/Qualifiers
FT Disulfide-bond 7..16
XX
PN WO200040725-A1.
XX
PD 13-JUL-2000.
XX
PF 27-DEC-1999; 99WO-JP07336.
XX
PR 28-DEC-1998; 98JP-0374454.
PR 28-APR-1999; 99JP-0122688.
PR 02-SEP-1999; 99JP-0249300.
XX
PA (TAKE) TAKEDA CHEM IND LTD.
XX
PI Mori M, Shimomura Y, Takekawa S, Sugo T, Ishibashi Y, Kitada C;
PI Suzuki N;
XX
DR WPI; 2000-475832/41.
XX
PT Screening methods for compounds as SLC-1 (ant)agonists useful in the
PT treatment of eating disorders and as preventives and remedies for e.g.
PT atonic bleeding and Prader-Willi syndrome -
XX
PS Claim 8; Page 106; 123pp; Japanese.
XX
CC The present invention describes a method for screening components (I) or
CC their salts that can alter the binding properties of melanin-
CC concentrating hormone (MCH) or its derivative or salt to SLC-1 or its
CC salt. Compounds identified by (I) are useful as SLC-1 (ant)agonists in
CC eating disorders and as preventives and remedies for e.g. period pains,
CC uterine recovery failure, caesarean section, artificial interruption of
CC pregnancy, galactostosis, tonic uterine contraction, foetal asphyxia,
CC rupture of uterus, cervical rupture, premature birth and Prader-Willi
CC syndrome. The present sequence represents a rat MHC ligand peptide
CC which is used in the exemplification of the present invention.
XX
SQ Sequence 19 AA;

Query Match 100.0%; Score 90; DB 21; Length 19;
Best Local Similarity 100.0%; Pred. No. 2.3e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LRCMLGRVYRPCWQV 15
||||||||||||||||
Db 5 LRCMLGRVYRPCWQV 19

RESULT 11
AAY90259
ID AAY90259 standard; Peptide; 19 AA.
XX
AC AAY90259;
XX
DT 19-SEP-2000 (first entry)
XX
DE Melanin concentrating hormone peptide.
XX
KW Human; 11cby; diagnosis; therapy; infection; cancer; diabetes; obesity;
KW anorexia; bulimia; asthma; Parkinson's disease; congestive heart failure;
KW hypotension; hypertension; urinary retention; osteoporosis; delirium;
KW angina pectoris; myocardial infarction; ulcer; allergy; manic depression;
KW benign prostatic hypertrophy; psychotic disorder; neurological disorder;
KW anxiety; schizophrenia; dementia; severe mental retardation; dyskinesia;
KW Huntington's disease; Gilles dela Tourette's syndrome;
KW genetic counselling; melanin-concentrating hormone.
XX
OS Homo sapiens.
XX
PN WO200037113-A1.
XX
PD 29-JUN-2000.
XX
PF 22-DEC-1999; 99WO-US30622.
XX
PR 22-DEC-1998; 98US-0218467.
XX
PA (SMIK) SMITHKLINE BEECHAM CORP.
XX
PI Sathe G, Ellis CE, Halsey W, Bergsma D;
XX
DR WPI; 2000-452132/39.
XX
PT Novel 11cby polynucleotides for diagnosis, prevention and treatment of
PT cancer, diabetes, psychotic and neurological disorders, microbial
PT infections and for genetic counselling -
XX
PS Disclosure; Page 6; 45pp; English.
XX
CC This sequence represents a melanin-concentrating hormone peptide, that
CC is bound by the human 11cby protein of the invention. 11cby
CC polynucleotides are useful as diagnostic reagents for detecting the
CC presence or absence of a variation in a 11cby allele in an individual.
CC Assaying for the presence or absence of a 11cby polynucleotide mutation
CC by isolating DNA from the individuals is useful for screening an
CC individual for an increased risk of developing a disease or for
CC diagnosing a disease. 11cby polynucleotides may contain polymorphic
CC markers, and are therefore useful for genetic association
CC studies searching for a disease susceptibility gene and/or therapeutic
CC response gene. Diseases treated include bacterial, fungal, protozoan and
CC viral infections, particularly infection caused by human immunodeficiency
CC virus (HIV)-1 or HIV-2, cancers, diabetes, obesity, feeding and drinking
CC abnormalities, such as anorexia and bulimia, asthma, Parkinson's disease,
CC acute and congestive heart failure, hypotension, hypertension, urinary
CC retention, osteoporosis, angina pectoris, myocardial infarction, ulcers,
CC allergies, benign prostatic hypertrophy, psychotic and neurological
CC disorders, including anxiety, schizophrenia, manic depression, delirium,
CC dementia or severe mental retardation, and dyskinesias, such as
CC Huntington's disease or Gilles dela Tourette's syndrome. The methods for
CC detecting a mutation in the 11cby gene, can therefore be further extended
CC to include genetic counselling for an individual with respect to the
CC individual's potential for developing one of the above diseases.
XX
SQ Sequence 19 AA;

Query Match 100.0%; Score 90; DB 21; Length 19;
Best Local Similarity 100.0%; Pred. No. 2.3e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LRCMLGRVYRPCWQV 15
||||||||||||||||
Db 5 LRCMLGRVYRPCWQV 19

RESULT 12
AAU25615
ID AAU25615 standard; Peptide; 19 AA.
XX
AC AAU25615;
XX
DT 18-DEC-2001 (first entry)
XX
DE G Protein-Coupled Receptor-binding cyclic neuropeptide A.

```
XX
KW   Human; G-protein coupled receptor; GPCR; mental disorder; schizophrenia;
KW   attention deficit disorder; anxiety; depression; bipolar disorder;
KW   neurological disorder; Huntington's disease; dementia; obesity; anorexia;
KW   metabolic disorder; Parkinson's disease; Tourette's syndrome; thrombosis;
KW   type 2 diabetes; cardiovascular disorder; myocardial infarction; cancer;
KW   cardiomyopathy; atherosclerosis; human immunodeficiency virus; HIV;
KW   viral infection; immunostimulant; neuroleptic; nootropic; tranquiliser;
KW   antidepressant; anorectic; gene therapy.
XX
OS   Homo sapiens.
XX
PN   WO200162797-A2.
XX
PD   30-AUG-2001.
XX
PF   23-FEB-2001; 2001WO-US05676.
XX
PR   23-FEB-2000; 2000US-0184247.
PR   23-FEB-2000; 2000US-0184303.
PR   23-FEB-2000; 2000US-0184304.
PR   23-FEB-2000; 2000US-0184305.
PR   23-FEB-2000; 2000US-0184397.
PR   02-MAR-2000; 2000US-0186457.
PR   03-MAR-2000; 2000US-0186810.
PR   09-MAR-2000; 2000US-0188064.
PR   13-MAR-2000; 2000US-0188880.
PR   03-APR-2000; 2000US-0194344.
PR   23-JUN-2000; 2000US-0213861.
PR   11-JUL-2000; 2000US-0217369.
PR   11-JUL-2000; 2000US-0217370.
PR   14-JUL-2000; 2000US-0218337.
PR   20-JUL-2000; 2000US-0218492.
XX
PA   (PHAA ) PHARMACIA & UPJOHN CO.
XX
PI   Vogeli G,  Wood LS,  Parodi LA,  Lind P;
XX
DR   WPI; 2001-570628/64.
XX
PT   New isolated nucleic acid encoding a new G-protein coupled receptor
PT   polypeptide for detecting receptor modulators that can treat mental
PT   disorders, such as schizophrenia, anxiety, depression, or obesity -
XX
PS   Claim 95; Page 140; 279pp; English.
XX
CC   Sequences AAU25554-AAU25616 represent human G-protein coupled receptor
CC   (GPCR) polypeptides of the invention. The proteins and their associated
CC   DNA sequences can be used to identify compounds which bind to GPCR
CC   polypeptides and in screening for compounds that modulate GPCR activity.
CC   By screening a human subject for the presence of mutations in GPCR DNA, a
CC   GPCR-related disorder or a genetic predisposition can be diagnosed. The
CC   sequences can also be used for treatment and prevention of mental
CC   disorders such as schizophrenia, attention deficit disorder, anxiety,
CC   depression, dementia and bipolar disorder, neurological disorders such as
CC   Huntington's disease, Parkinson's disease and Tourette's syndrome,
CC   metabolic disorders such as obesity, anorexia and type 2 diabetes,
CC   cardiovascular disorders such as thrombosis, myocardial infarction,
CC   cardiomyopathy and atherosclerosis, viral infections caused by HIV and
CC   cancers.
XX
SQ   Sequence   19 AA;

  Query Match             100.0%;  Score 90;  DB 22;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-06;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 LRCMLGRVYRPCWQV 15
              |||||||||||||||
Db          5 LRCMLGRVYRPCWQV 19


RESULT 13
AAE07335
ID   AAE07335 standard; peptide; 19 AA.
XX
AC   AAE07335;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Mammalian melanin-concentrating hormone receptor.
XX
KW   Melanin-concentrating hormone; MCH analogue; signal transduction;
KW   appetite; therapy; anorexia; acquired immune deficiency syndrome; AIDS;
KW   wasting; cachexia; frail elderly; weight maintenance; cancer; anorectic;
KW   pain reduction; stress reduction; sexual dysfunction; cyclic.
XX
OS   Mammalia.
XX
FH   Key             Location/Qualifiers
FT   Disulfide-bond  7..16
XX
PN   WO200157070-A1.
XX
PD   09-AUG-2001.
XX
PF   01-FEB-2001; 2001WO-US03293.
XX
PR   03-FEB-2000; 2000US-0179967.
XX
PA   (MERI ) MERCK & CO INC.
XX
PI   Bednarek M;
XX
DR   WPI; 2001-483416/52.
XX
PT   Novel peptide encoding a melanin-concentrating hormone analog useful
PT   for increasing weight or appetite -
XX
PS   Example 4; Fig 1; 66pp; English.
XX
CC   The present invention relates to truncated melanin-concentrating hormone
CC   (MCH) analogues active at the MCH receptor. The truncated MCH analogues
CC   are optionally modified peptide derivatives of mammalian MCH. The MCH
CC   analogues can bind to the MCH receptor and bring about signal
CC   transduction. The MCH agonists can be used to facilitate a weight gain,
CC   maintenance of weight and/or an appetite increase. The MCH agonists can
CC   also be used to treat disorders such as anorexia, acquired immune
CC   deficiency syndrome (AIDS), wasting, cachexia and frail elderly. The MCH
CC   antagonists can be used to facilitate weight loss, appetite decrease,
CC   weight maintenance, cancer treatment, pain reduction, stress reduction
CC   and/or treatment of sexual dysfunction. The present sequence is a
CC   mammalian MCH receptor.
XX
SQ   Sequence   19 AA;

  Query Match             100.0%;  Score 90;  DB 22;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-06;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 LRCMLGRVYRPCWQV 15
              |||||||||||||||
Db          5 LRCMLGRVYRPCWQV 19


RESULT 14
AAB68894
ID   AAB68894 standard; Peptide; 19 AA.
XX
AC   AAB68894;
XX
DT   24-APR-2001  (first entry)
XX
DE   Human mMCH.
XX
KW   Human; mMCH; mammalian melanin-concentrating hormone; AXOR21;
```

KW G-protein coupled receptor; anorectic; antidiabetic; cytostatic;
KW antiasthmatic; antiparkinsonian; cardiant; hypertensive; osteopathic;
KW antianginal; cerebroprotective; antiulcer; antiallergic; antimigraine;
KW antiemetic; tranquiliser; antimanic; gene therapy; vaccine; cancer;
KW neurological disorder.
XX
OS Homo sapiens.
XX
PN WO200107606-A1.
XX
PD 01-FEB-2001.
XX
PF 27-JUL-2000; 2000WO-GB02899.
XX
PR 27-JUL-1999; 99GB-0017627.
PR 24-AUG-1999; 99GB-0020046.
XX
PA (SMIK) SMITHKLINE BEECHAM PLC.
XX
PI Duckworth DM, Hill J, Muir AI, Szekeres PG;
XX
DR WPI; 2001-182790/18.
XX
PT Novel G-protein coupled receptor polypeptide, AXOR21, useful for
PT treating obesity, diabetes, eating disorders such as anorexia and
PT bulimia, hypertension, osteoporosis, angina pectoris and myocardial
PT infarction -
XX
PS Disclosure; Page 31; 42pp; English.
XX
CC The present sequence is mammalian melanin-concentrating hormone (mMCH).
CC mMCH is a ligand for AXOR21, a G-protein coupled receptor.
CC AXOR21 polynucleotides and polypeptides are useful for treating and
CC diagnosing conditions such as pain, cancers, diabetes, obesity, anorexia,
CC bulimia, asthma, Parkinson's disease, acute heart failure, hypotension,
CC hypertension, urinary retention, osteoporosis, angina pectoris,
CC myocardial infarction, stroke, ulcers, allergies, benign prostatic
CC hypertrophy, migraine, vomiting, psychotic and neurological disorders
CC including anxiety, schizophrenia, manic depression, depression, delirium,
CC dementia and severe mental retardation, and dyskinesis such as
CC Huntington's disease or Gilles de la Tourette's syndrome. AXOR21
CC polynucleotides and polypeptides are also useful for screening and
CC structure based designing of antagonists, agonists and inhibitors of
CC AXOR1. AXOR21 polynucleotides are useful for chromosome localisation
CC studies, as diagnostic reagents for detecting mutations in associated
CC genes, and as valuable tools for tissue expression studies. AXOR21
CC polynucleotides and polypeptides are useful as vaccines.
XX
SQ Sequence 19 AA;

Query Match 100.0%; Score 90; DB 22; Length 19;
Best Local Similarity 100.0%; Pred. No. 2.3e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LRCMLGRVYRPCWQV 15
||||||||||||||||
Db 5 LRCMLGRVYRPCWQV 19

RESULT 15
AAB48153
ID AAB48153 standard; peptide; 19 AA.
XX
AC AAB48153;
XX
DT 02-APR-2001 (first entry)
XX
DE Rat/human melanin-concentrating hormone (MCH) receptor fragment.
XX
KW MCH receptor; melanin-concentrating hormone; anorectic; antiinfertility;
KW immunomodulator; antiparkinsonian; nootropic; anticonvulsant; human;
KW neuroprotective; vasotropic; tranquilizer; antidepressant; neuroleptic;
KW gynecological; contraceptive; osteopathic; GPR24; SLC-1; rat.
XX
OS Homo sapiens.
OS Rattus norvegicus.
XX
PN WO200075166-A1.
XX
PD 14-DEC-2000.
XX
PF 06-JUN-2000; 2000WO-US15503.
XX
PR 08-JUN-1999; 99US-0327807.
XX
PA (REGC) UNIV CALIFORNIA.
XX
PI Civelli O, Saito Y, Nothacker H;
XX
DR WPI; 2001-050021/06.
XX
PT Use of melanin concentrating hormone receptor for identifying MCH
PT receptor agonist or antagonist, receptor ligand, and an individual
PT susceptible to the receptor-associated conditions such as memory
PT disorders -
XX
PS Disclosure; Fig 4A; 61pp; English.
XX
CC The invention relates to the use of MCH (melanin-concentrating hormone)
CC receptor for identifying (i) agonist or antagonist of the receptor, (ii)
CC an MCH receptor ligand, (iii) an individual having or susceptible to MCH
CC receptor-associated conditions. Human and rat MCH receptor sequences are
CC provided which can be used in the method of the invention for identifying
CC disorders of body weight (such as disorders involving increased (obesity)
CC or decreased body weight such as under weight or cachexia), mood
CC (depression, anxiety disorders, psychotic disorders, schizophrenia),
CC memory and learning (Alzheimer's disease, dementia, etc.), sleep
CC (insomnia, bedwetting, sleepwalking, sleep apnea, etc.), dopaminergic
CC system function (such as Parkinson's disease, Huntington's disease),
CC reproduction (as male or female contraceptives, or male or female sexual
CC dysfunction, impotence, failure of lactation, infertility, etc.) or
CC growth (dwarfism or acromegaly) and also disorders of behaviour such as
CC autistic disorder, Asperger's disorder etc. The agonist or antagonist
CC compounds can be used therapeutically to prevent or ameliorate these
CC conditions. Identifying an individual having or susceptible to MCH
CC receptor associated conditions allows optimal medical care for the
CC individual, including appropriate genetic counseling and prophylactic and
CC therapeutic intervention. The present sequence represents a fragment of
CC the rat/human MCH receptor.
XX
SQ Sequence 19 AA;

Query Match 100.0%; Score 90; DB 22; Length 19;
Best Local Similarity 100.0%; Pred. No. 2.3e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LRCMLGRVYRPCWQV 15
||||||||||||||||
Db 5 LRCMLGRVYRPCWQV 19

Search completed: June 25, 2003, 11:51:51
Job time : 38.7 secs